REMARKS/ARGUMENTS

The Applicant thanks the Examiner for the careful review of this application. No amendments to the pending claims have been made. No new matter has been added. Claims 12-30 remain pending in this application.

REJECTIONS UNDER 35 U.S.C. § 103

Claims 12, 14-16, 19, 20, 26, 27 and 28 were rejected under 35 U.S.C. § 103(a) as being unpantentable over U.S. Patent No. 3,614,126 to Carlson (hereinafter "Carlson") in view of U.S. Patent No. 3,501,167 to Palowsky (hereinafter "Palowsky").

Claims 17, 18, 21 and 22 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Carlson in view of Palowsky as applied to claims 12 and 19, and further in view of U.S. Patent No. 2,155,130 to Hanel (hereinafter "Hanel").

Claims 23-25, 29 and 30 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Carlson in view of Palowsky as applied to claim 12 above, and further in view of U.S. Patent No. 4,588,206 to Powers (hereinafter "Powers").

THE PRIOR ART

Carlson discloses an apparatus for stabilizing vehicles and reducing the rapid or erratic movement of a vehicle (col. 1 lines 31-35). Carlson further discloses weight elements (Fig. 9, refs. 63 and 65) disposed upon the top of spring support means that move in a direction which assist the operator in bringing a vehicle to a rapid stop (col. 4, lines 24-27; col. 4, 33-40; Fig. 9, refs. 61 and 68).

Palowsky discloses a vehicle stabilizer with a chamber 15 mounted on the rear end of a vehicle to offset the center of gravity of the inertial mass from the longitudinal axis of the shaft, whereby the moment of inertia of the weight counteracts the front-to-rear pitching movement of the vehicle (col. 2, lines 40-50). The apparatus disclosed in

Palowsky is shorter than the apparatus of the present invention and the springs 10 and 11 are strong such that the weight oscillates.

Hanel discloses an anti-skidding device for motor vehicles with V-shaped carrier fixed at the rear part of the underframe, parallel to the rear axle and two weights arranged symmetrically to the vertical longitudinal central plane of the vehicle. Hanel further discloses that the weights are elastically held in their normal position and the weights are displaced in one direction or the other overcoming the resistance offered by the yielding means.

Powers discloses a vehicle stabilizer for mounting on a rear portion of a vehicle that reduces vehicle skidding and dampens vehicle vibration. Powers further discloses an inverted V-shaped housing mounted on the rear of the vehicle where the interior angle of the V-shaped housing is substantially 160° (see claim 6). In other words, the tilt of each side is 10°.

THE PRIOR ART DISTINGUISHED

Claim 12 specifically requires "a weighty drum circumferentially surrounding a portion of said guiding axis equal to a length of said weighty drum..." Carlson, in contrast, discloses that weights 63 and 65 are rigidly disposed upon the top of the spring support means 61 and 68 (col. 4, lines 24-27). The Examiner admits at page 2 of the Office action that "Carlson fails to provide specifics or structure for the stabilizing devices." Carlson neither teaches nor reasonably suggests a weight that circumferentially surrounds a guiding axis that moves along the axis. Carlson's teaching is different both structurally and functionally and serves a meaningfully different purpose from the claimed invention.

For example, Carlson's apparatus is used for stabilizing and reducing the tendency of a vehicle to skid in response to transient forces. The present invention is used to temporarily transfer longitudinal momentum to a weighty drum to provide a more comfortable braking experience for passengers. Further, the braking distance is decreased because the frictional force of the tires with the ground is increased. Since the front end of the two braking buffers installed on the two sides in parallel is tilted 1° to 4° downward, the downward component of the momentum will cause the front end of the vehicle to move downward thereby increasing the contact area and pressure of the tires with the ground. Furthermore, the apparatus on the rear of a vehicle is used to decrease the radius of turning by decreasing the outward centrifugal force of the front wheel.

Palowsky discloses an apparatus that is shorter than the claimed invention with stronger springs. In contrast, the braking device of the present invention is as wide as the rear body of a vehicle so that the weight drum would have enough moving ranges to produce sufficient momentum to apply a force to turn the vehicle. For example, when the driver turns left, the counterclockwise turning of the vehicle is enhanced. Furthermore, the weight drum disclosed in Palowsky oscillates while in operation because the springs 10 and 11 are strong (col. 1, line 66). The drum in Palowsky does not produce momentum. Moreover, the void in the weight drum can produce rotation, which has adverse effects on braking and turning. Therefore, the apparatus in Palowsky would not enhance the turning of a vehicle. Moreover, Palowsky does not disclose braking buffer devices. In contrast, the present invention teaches two braking buffers installed on two sides in parallel and tilted 1° to 4° downward such that the two braking buffers provide more comfortable braking experience as well as decreasing braking distance.

In view of the foregoing, the applicant respectfully requests that the cited prior art, alone or in combination, does not disclose the present invention. Withdrawal of the rejection of claim 12 is respectfully requested. Claims 14-22, which depend from claim 12, directly or indirectly, are allowable at least for depending from an allowable base claim.

Claims 23-25, which depend from claim 12, directly or indirectly, are allowable at least for depending from an allowable base claim. Contrary to the Powers reference, the braking buffer device on the two sides of the vehicle is tilted between approximately

1° and 4°. This provides better braking and turning of the vehicle. Otherwise, the downward component of the momentum will increase contact areas and pressure of the tires with the ground leading to the breakdown of the tires. Therefore, claims 23-25 are allowable over the cited references.

Claim 26 includes the language "a weighty drum circumferentially surrounding a portion of said guiding axis equal to a length of said weighty drum..." At least for similar reasons to claim 12, claim 26 is allowable over the cited references.

Claim 27 includes the language "wherein said braking buffer device circumferentially surrounds a portion of a guiding axis equal to a length of said braking buffer device..." At least for similar reasons to claim 12, claim 26 is allowable over the cited references.

Claim 28 includes the language "a left weighty drum circumferentially surrounding a portion of said left guiding axis equal to a length of said left weighty drum..." At least for similar reasons to claim 12, claim 28 is allowable over the cited references.

Claim 29 and 30, which depend from claim 28, directly or indirectly, are allowable at least for depending from an allowable base claim. Furthermore, for at least similar reasons to claims 23-25, claims 29 and 30 are allowable over the cited references.

CONCLUSION

Applicant believes that all pending claims are allowable and a Notice of Allowance is respectfully requested. The amendment was made to expedite the prosecution of this application. Applicant respectfully traverses the rejections of the amended claims and reserves the right to re-introduce them and claims of an equivalent scope in a continuation application.

If the Examiner believes that a conference would be of value in expediting the prosecution of this application, he is cordially invited to telephone the undersigned counsel at the number set out below.

Respectfully submitted,
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